



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 15 JUL 2005	
WIPO	PCT

Applicant's or agent's file reference P/27047.WO		FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/GB2004/002716		International filing date (day/month/year) 24.06.2004		Priority date (day/month/year) 24.06.2003
International Patent Classification (IPC) or national classification and IPC C09D5/18				
Applicant W. & J. LEIGH & CO. et al				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input checked="" type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand 04.12.2004		Date of completion of this report 04.07.2005		
Name and mailing address of the International preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Telephone No. +49 89 2399- 8305 Marquis, D. 		

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/002716

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-17 as originally filed

Claims, Numbers

1-17 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY

International application No.
PCT/GB2004/002716

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2,5,6,8-11,14,15,16
	No: Claims	1,3-4,7,12,13,17
Inventive step (IS)	Yes: Claims	2,5,6,8-11,14,15,16
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-17.
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VI Certain documents cited

1. Certain published documents (Rule 70.10)

and / or

2. Non-written disclosures (Rule 70.9)

see separate sheet

Point V:

Novelty:

D1 WO03066749 discloses also a liquid intumescent coating composition comprising a resin system comprising a polymeric component, an ethylenically unsaturated monomer (page 6 lines 3-13) and an intumescent agent (page 10 line 5- page 11 line 21) and a free radical initiator (see examples and page 4 line 17). The coating has a minimized drying time page 3 lines 9-10.

The subject-matter of claims 1,3,4,7,12,13,16,17 is not novel over D1.

D1 does not disclose the use of a solid thermoplastic resin and not the polymeric component of claims 5,6,10 or monomer of claims 8,11.

The method of curing the composition (claim 13) is also not novel over D1.

D1 does not disclose the use of organic peroxides (claims 14 and 15) or a cure temperature of 20°C (claim 16). Claim 17 uses a technical feature relating to the coating obtained after curing and cannot characterize the method claim (claim 13).

D2 WO02096996 and D3 GB2029837 disclose an intumescent coating composition comprising a polymer resin and intumescent ingredients. D2 and D3 do not disclose the use of an ethylenically unsaturated monomer as in claims 1 and 13 of the application. The subject-matter of claims 1-17 is novel over D2,D3.

Inventive step:

D1 is a document according to Rule 64.3 PCT and Rule 70.10 PCT and is not part of the prior art to assess on the inventive step of the claims.

D2 discloses the same intumescent ingredients used to provide a coating displaying faster drying times and allowing a higher thickness of the coating. D2 is chosen as closest prior art.

The main feature characterizing the subject-matter of claims 2,5,6,8-11,14,15,16 is nevertheless the presence of an ethylenically unsaturated monomer in the intumescent composition. The application demonstrate that the presence of the monomer improves the drying times of the coating and allows higher thicknesses of coatings (objective technical problem) as the compositions of D2.

The use of an ethylenically unsaturated monomer to solve the technical problem is not suggested in the prior art documents D2,D3.

**INTERNATIONAL PRELIMINARY
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(SEPARATE SHEET)**

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The subject-matter of claims 2,5,6,8-11,14,15,16 is inventive over D2-D3.

Note: Any technical feature (like the use of an organic peroxide) added to claims 1 and 13 and providing these claims with novelty over D1, would render the claims 1-17 novel and inventive over D2-D3 as D1 is not prior art for inventive step assessment.